



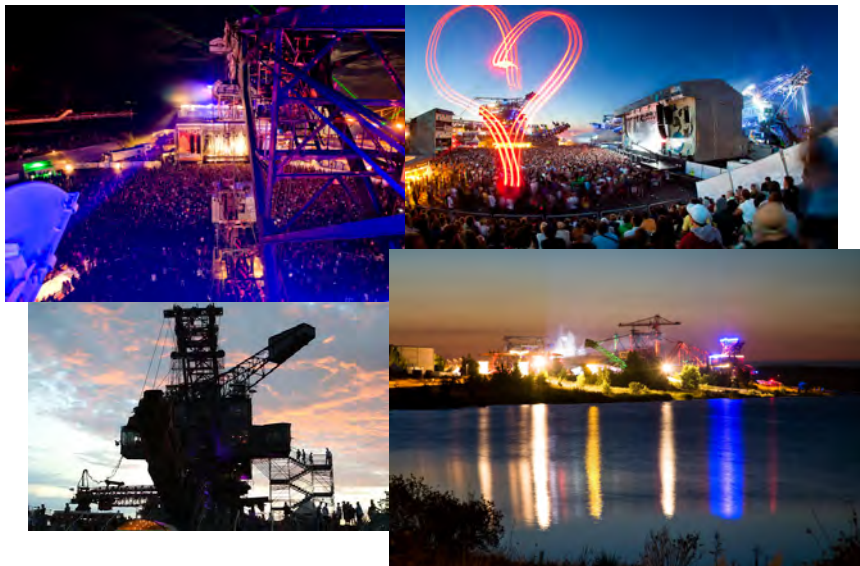
SOLAR PANELS FERROPOLIS

June 2011

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Ferropolis: A very special location



Background

Installing Solar Panels in Ferropolis

Bauhaus Dessau:

Ferropolis is a
Bauhaus project ➤
reformery thought

M!ECO: Green Event
Initiative

QCells: Regional
provider of
regenerative
energies

➔ **Goal:** to link innovative potential with
international prestige and regional roots

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Installing the panels



Roof-surfaces in m²:

Orangerie	531 m²
Hall 1	920 m²
Hall 2	920 m²
Sanitary facilities	530 m²

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Pre-Installation Preparations

- **Finding a partner:** QCells as a regional company with international prestige
- **Financing:** classic bank credit, pays for itself by selling produced electricity & sponsoring
- **Finding a buyer:** local supplier of electricity has to authorize the production of solar energy by checking if the power can be fed into the circuit (Envia for Ferropolis)

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Process



- Panels collect solar energy
- Energy directly fed into the electric circuit
- Envia functions as buyer for the produced solar energy
- Ferropolis uses about 20% itself for daily needs
- **Equity Return: 6%**

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Power supply



Solar Panels produce 170,000
kw/h electricity per year (equals
50 households)

Melt! Festival uses 73,000
kw/h in one weekend +
70,000 kw/h from
aggregates

- Theoretically the solar panels could provide the complete festival with energy

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Problems

- Receiving a credit
- Getting QCells as a partner
- Electricity storage

The latter problem remains...

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Problem: Electricity Storage



- no technology for storing the annual electricity production
- possible storage modules would take up the complete space on the peninsular
- Batteries too expensive and environmentally unfriendly
- Electricity has to be fed into the power circuit right away
- **no autarchy possible!**

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Problem: Electricity Peaks

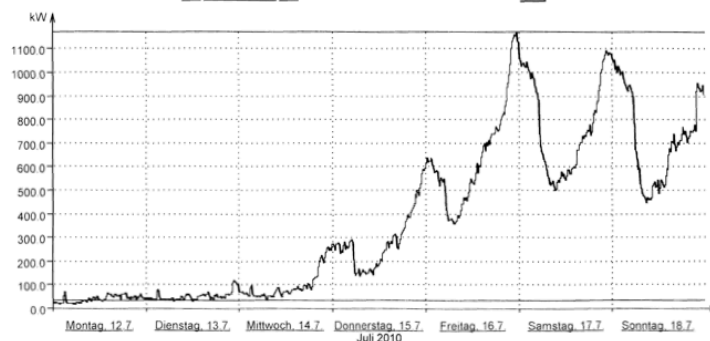
Erweiterte Auswertung - Grafische Linienanzeige



Auswertungszeitraum: 01.03.2010 - 17.02.2011

Zeitreihe Überlagerung

< Zoom zurück > ☒ Raster ☒ Min/Max ☒ Y zentrieren



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Problem: Electricity Peaks

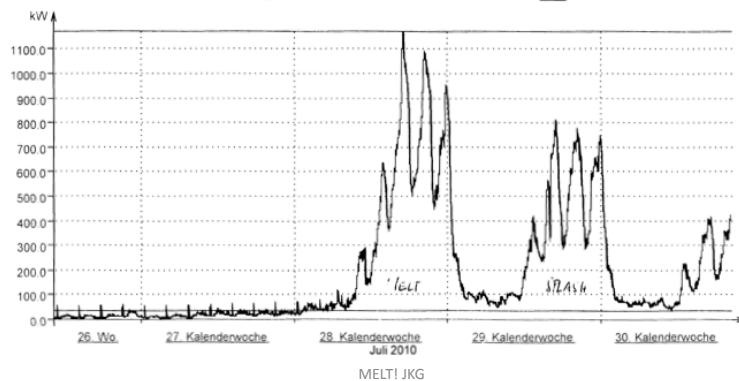
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Goal

- to cut the power peaks and reach a (semi)-autarchy
- Key: interim energy storage
- Key: finding partners/universities/researchers to work on a practicable energy storage system
- Ferropolis as a playground for new ideas and renewable energies
- Ferropolis: a monument for the changing energy industry: from coal-mining site to open-air museum producing solar power

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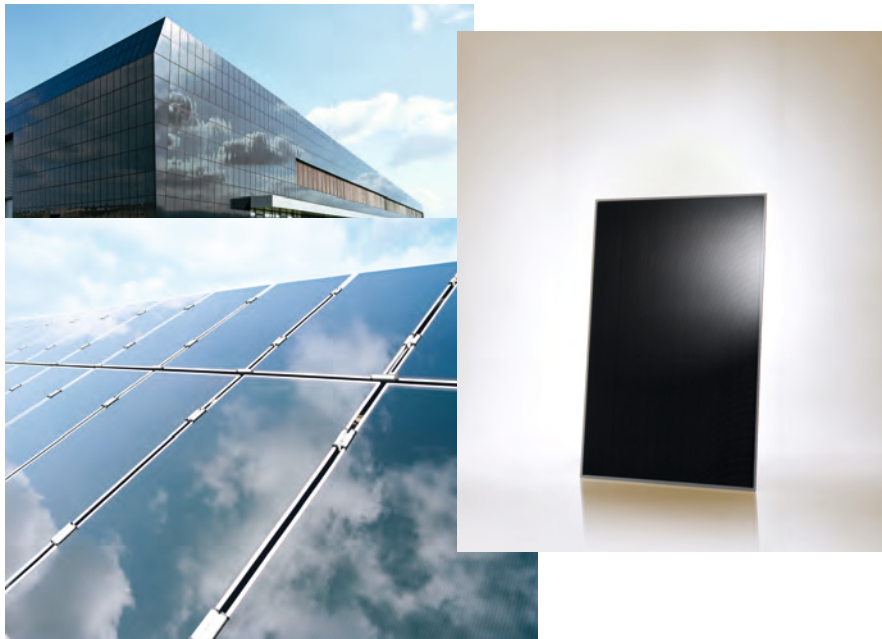
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What do you get from it?

- **Economic advantage:** Solar panels are a profitable investment – the equity return ranges between 5-8%
- **New sponsoring possibilities:** green electricity emotionalises power
- **Your own image:** solar energy has a good reputation
- **Renewable energy:** taking active part in the energy transition in Germany
- **Ultimate Goal:** to cut energy peaks and reach a (semi-) autarchy

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